

## EAST Search History

## EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	453	60/806,754,736.ccls. and (vane or blade or airfoil)	US-PGPUB; USPAT	ADJ	ON	2009/09/05 14:20
S1	0	("4315406"   "4347037"   "5125793"   "6192688").PN.).PN.	US-PGPUB; USPAT	OR	OFF	2008/06/17 12:02
S2	4	("4315406"   "4347037"   "5125793"   "6192688").PN.	US-PGPUB; USPAT	ADJ	ON	2008/06/17 12:03
S3	100	(("6047552") or ("4267698") or ("4380905") or ("4573315") or ("5313783") or ("5613357") or ("4315406") or ("4369628") or ("4375952") or ("5353589") or ("5572862") or ("3663172") or ("4249371") or ("4250710") or ("4304093") or ("4305919") or ("4356693") or ("4377067") or ("4426842") or ("4442673") or ("4446693") or ("4474140") or ("4534456") or ("4545208") or ("4610135") or ("4614083") or ("4767261") or ("4786233") or ("4787209") or ("4790140") or ("4841921") or ("4852346") or ("4863342") or ("4889469") or ("4923371") or ("4934837") or ("4964270") or ("5000003") or ("5012645") or ("5020319") or ("5216876") or ("5223320") or ("5259196") or ("5321951") or ("5323612") or ("5353586") or ("5393198") or ("5406785") or ("5407320") or ("5423178") or ("5435139") or ("5438823") or ("5531568") or ("5570580") or ("5667043") or ("5675970") or ("5737921") or ("5845481") or ("5894732") or ("5899074") or ("5901549") or ("5918467") or ("5956955") or ("5983623") or ("6003781") or ("6006523") or	US-PGPUB; USPAT	OR	OFF	2008/06/17 12:05

		("6047547") or ("6125623") or ("6153168") or ("6159553") or ("6178733") or ("6260350") or ("6273673") or ("6332909") or ("6464459") or ("6957538") or ("20040231333") or ("20070017225") or ("20070234703") or ("5803022") or ("5987876") or ("5193352") or ("5390505") or ("4589253") or ("5175993") or ("6085514") or ("6099245") or ("4475343") or ("4845941") or ("5181376") or ("5497611") or ("5787711") or ("5832732") or ("5839283") or ("5884470") or ("5953919") or ("5967743") or ("5993156") or ("6047549") or ("6089024") or ("").pn.)).PN.				
S4	1	"6052986".pn.	US-PGPUB; USPAT	ADJ	ON	2008/06/17 12:45
S5	19	("2849210"   "3051439"   "3734639"   "4134709"   "4156582"   "4259037"   "4338780"   "4522894"   "4845941"   "5003766").PN. OR ("5125793").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/06/17 12:47
S6	44	("2422213"   "2498728"   "2654219"   "2657531"   "2919549"   "3064425"   "3349558"   "3554663"   "3560107"   "3572031"   "3584972"   "3593525"   "3606572"   "3606573"   "3616125"   "3619082"   "3620643"   "3806276"   "3864199"   "3900628"   "3910039"   "3963368"   "4004056"   "4064300"   "4168348").PN. OR ("4315406").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/06/17 12:57
S7	27	("2548945"   "3041834"   "3886735"   "3918255"   "4004056"   "4064300"   "4071194"   "4269032"   "4273824"   "4302940"   "4312186"   "4315406"   "4629397").PN. OR ("4838030").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/06/17 13:02
S8	13	("2657531").URPN.	USPAT	ADJ	ON	2008/06/17 13:25

S9	10	("3169367"   "3623711"   "3937007"   "5012645"   "5123248").PN. OR ("5497611"). URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/06/17 13:37
S10	39	("3422620"   "4071194"   "4422300"   "4695247"   "4864827"   "4901522"   "4912922"   "5000005"   "5216886").PN. OR ("5435139"). URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/06/17 13:44
S11	14	("20020116929"   "4901522"   "5027604"   "5363643"   "5435139"   "5560197"   "5758503"   "5782294"   "6029455"   "6240731"   "6408628"   "6470685"   "6701714"   "7146815").PN. OR ("7363763").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/06/17 13:45
S12	172	60/754.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2008/06/17 14:25
S13	39	("2944388"   "3934409"   "4052844"   "4058977"   "4292801"   "4671069"   "4731989"   "4898001"   "4910957"   "4928481"   "4955191"   "5069029"   "5259184"   "5297391"   "5385015"   "5394688"   "5479781").PN. OR ("6192688").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/06/17 14:48
S14	57	("2926495"   "3872664"   "3981675"   "4073134"   "4112676"   "4805411").PN. OR ("4928481").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/06/17 15:00
S15	0	"806".ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2008/06/17 15:25

S16	482	60/806.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2008/06/17 15:25
S17	111861	"60".clas.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2008/06/17 16:23
S18	26149	S17 and (cool or cooling)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2008/06/17 16:23
S19	9665	S18 and combustion chamber	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2008/06/17 16:24
S20	8119	S19 and (air and fuel)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2008/06/17 16:24
S21	1186	S20 and (transverse)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2008/06/17 16:25
S22	1928	S20 and (gas turbine engine)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2008/06/17 16:25

S23	308	S22 and transverse	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2008/06/17 16:26
S24	43	("2544538"   "3584972"   "3605405"   "3845620"   "3990232"   "4056332"   "4071194"   "4109459"   "4379677"   "4573865"   "4616976"   "4852355"   "4896510"   "4901522"   "4909032"   "4916906"   "5031693"   "5181379"   "5216886").PN. OR ("5363654"). URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/06/17 17:06
S27	275116	combustor or burner	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2008/06/18 08:47
S28	1744266	S27 and cool or cooling	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2008/06/18 08:47
S29	73796	S27 and (cool or cooling)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2008/06/18 08:48
S30	38730	S29 and (fuel and air)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2008/06/18 08:48

S31	5578	S30 and (turbine engine)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2008/06/18 08:48
S32	137	S31 and (transverse same passage)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2008/06/18 08:49
S33	4	S31 and (fuel same transverse passage)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2008/06/18 09:07
S34	665	60/806,754.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2008/11/03 17:29
S35	76	S34 and cool\$5 and (blade with fuel)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2008/11/03 17:29
S36	0	("2005/0229601").URPN.	USPAT	ADJ	ON	2008/11/03 17:30
S37	40	("2595822"   "2659529"   "2675671"   "2778601"   "2782000"   "2849210"   "2868500"   "2883151"   "3300965"   "3756020"   "4041697").PN. OR ("4190398").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/11/03 17:35
S38	9	("3355883"   "3756020"   "4190398").PN. OR ("6672075").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/11/03 17:36

S39	13	("2648520"   "3468513"   "3619076"   "3848307"   "3967353"   "4179240"   "4190398"   "4330235"   "4629397"   "6195979").PN. OR ("6565312").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/11/03 17:37
S40	22	("3446481"   "3446482"   "3807892"   "3816022"   "3902819"   "4156582"   "4179240"   "4236870").PN. OR ("4330235").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/11/03 17:39
S41	44	("3533712"   "3989412"   "4012167"   "4063851"   "4135855"   "4136516"   "4185369"   "4278400"   "4330235"   "4462754"   "4616976"   "4650949"   "4712979"   "5002460").PN. OR ("5813835").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/11/03 17:40
S42	1	("3533712"   "3989412"   "4012167"   "4063851"   "4135855"   "4136516"   "4185369"   "4278400"   "4330235"   "4462754"   "4616976"   "4650949"   "4712979"   "5002460").PN. and (fuel with blade)	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/11/03 17:47
S43	30	("2565594"   "2782000"   "3164367"   "3623825"   "3756020"   "3990837").PN. OR ("4136516").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/11/03 17:48
S44	2	S43 and (fuel with blade)	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/11/03 17:48
S45	20	((STEFAN) near2 (HOFFMANN)).INV.	US-PGPUB; USPAT	ADJ	ON	2008/11/03 17:55
S46	23999	turbine with cool\$3	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/11/03 17:56
S47	39970	turbine with cool\$3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2008/11/03 17:56

S48	6197	S47 and (fuel near5 fuel)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2008/11/03 17:56
S49	533	S47 and (fuel near5 (blade or stator))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2008/11/03 17:57
S50	813	S47 and (fuel near5 (blade or stator or vane))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2008/11/03 17:57
S51	765	S50 and air	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2008/11/03 17:57
S52	41	("2647368"   "2743579"   "3631673"   "3722216"   "3729930"   "3804551"   "3849025").PN. OR ("4565490").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2008/11/04 07:46
S53	1606	60/752-760.ccls.	US-PGPUB; USPAT	ADJ	ON	2009/01/18 17:07
S54	239	S53 and (hole with fuel)	US-PGPUB; USPAT	ADJ	ON	2009/01/18 17:07
S55	1091	combustor and (liner with fuel)	US-PGPUB; USPAT	ADJ	ON	2009/01/18 17:30
S56	15	("2647368"   "3729930"   "3804551"   "4136516").PN. OR ("4835958").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/01/18 18:34
S57	224	(blade or vane) with (transverse near passage)	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/01/18 18:49



S58	3498	combustor with liner	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/01/18 18:54
S59	2	S58 and (transverse passage)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/01/18 18:54
S60	5	S58 and (transverse near2 passage)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/01/18 18:55
S61	1	"20030150216"	US-PGPUB; USPAT	ADJ	ON	2009/01/28 15:10
S62	1	10/180212	US-PGPUB; USPAT	ADJ	ON	2009/01/28 17:04
S63	20391	combustor	US-PGPUB; USPAT	ADJ	ON	2009/01/28 17:33
S64	142205	liner	US-PGPUB; USPAT	ADJ	ON	2009/01/28 17:33
S65	6336	S64 with cool\$3	US-PGPUB; USPAT	ADJ	ON	2009/01/28 17:33
S66	1372	S65 and S63	US-PGPUB; USPAT	ADJ	ON	2009/01/28 17:33
S67	41	("2405785"   "2564497"   "3031844"   "3567399"   "3584972"   "3918255"   "3934408"   "3981142"   "4050239"   "4073137"   "4104017"   "4109459"   "4244178"   "4269032"   "4292376"   "4427362"   "4567730"   "4695247"   "4838031"   "5027604").PN. OR ("5687572").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/01/28 18:11

S68	24325	turbine with cool\$3	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/01/28 18:20
S69	7599	S68 and holes	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/01/28 18:20
S70	6918	S69 and (fuel or gas\$4)	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/01/28 18:20
S71	5073	S70 and (blade or vane)	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/01/28 18:21
S72	3764	S71 and engine	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/01/28 18:21
S73	1032	S72 and "60".clas.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/01/28 18:22
S74	1264	S72 and "415".clas.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/01/28 18:24
S75	31	"2,479,777"	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/01/28 18:59
S76	2	"2479777".pn.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/01/28 19:00
S77	2	"2636344".pn.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/01/28 19:00
S78	2	"2638741".pn.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/01/28 19:01
S79	2	"2647368".pn.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/01/28 19:02
S80	40	("2647368").URPN.	USPAT	ADJ	ON	2009/01/28 19:02
S81	1	"2653446".pn.	USPAT	ADJ	ON	2009/01/28 19:06
S82	1	"2981066".pn.	USPAT	ADJ	ON	2009/01/28 19:06

S83	1	"3037351".pn.	USPAT	ADJ	ON	2009/01/28 19:08
S84	1	"6582194".pn.	USPAT	ADJ	ON	2009/01/28 19:28
S85	1	"7217088".pn.	USPAT	ADJ	ON	2009/01/28 19:39
S86	14	("20030059305"   "20030223861"   "20040115053"   "20040151587"   "20040202542"   "3849025"   "4017210"   "5279111"   "6206638"   "6213714"   "6283708"   "6554563"   "7097418").PN. OR ("7217088"). URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/01/28 19:39
S87	26	("2487514"   "2618120"   "2779565"   "3275294"   "3453825"   "3584458"   "3647313"   "3782852"   "3989412"   "4040767"   "4415310"   "4900640"   "4904542"   "4916022"   "4927714").PN. OR ("5279111").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/01/28 19:43
S88	4232	416/97R,96R,96A,97A,241B,241R.ccls.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/01/28 20:06
S89	2142	S88 and (cool\$3 with turbine)	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/01/28 20:06
S90	1362	S89 and hole	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/01/28 20:07
S91	13	("3717419"   "4617072"   "4645421"   "4671997"   "5242264"   "5403153"   "5419039"   "5462800"   "5667359"   "5702232").PN. OR ("6769866").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/01/29 09:28

S92	38	("20020110698"   "4423097"   "4450184"   "4530884"   "4639388"   "4917960"   "4923747"   "5064727"   "5080934"   "5387299"   "5705231"   "5709919"   "5759932"   "5780146"   "5962076"   "5985368"   "5985470"   "6013592"   "6071628"   "6106959"   "6197424"   "6235370"   "6296945").PN. OR ("6733907").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/01/29 09:30
S93	60	("3910716"   "4396349"   "4519745"   "4530884"   "4563125"   "4563128"   "4629397"   "4639189"   "4643636"   "4645421"   "4768924"   "4790721"   "4838031"   "4907946"   "5027604"   "5226789"   "5306554"   "5314309"   "5328331"   "5358379"   "5375978"   "5382453"   "5484258"   "5493855"   "5494402"   "5584652"   "5605046"   "5616001"   "5630700"   "5640767"   "5720597"   "5791879"   "5820337"   "6000906"   "6164903"   "6197424"   "6200092"   "6241469"   "6280550"   "6325593"   "6368663"   "6514046"   "6554563").PN. OR ("6709230").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/01/29 09:33
S94	14	("3373970"   "3628880"   "3628885"   "3700348").PN. OR ("3809494").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/01/29 09:56
S95	2567	(turbine or blad or vane) with cool\$3 with hole	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/01/29 10:02
S96	3	S95 and (traverse near3 passag\$3)	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/01/29 10:02
S97	54	S95 and (Doublewall or (double near wall))	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/01/29 10:03
S98	3095	415/115,116.ccls.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/01/29 10:05
S99	954	S98 and (cool\$3 with hole)	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/01/29 10:06

S100	14	("20030059305"   "20030223861"   "20040115053"   "20040151587"   "20040202542"   "3849025"   "4017210"   "5279111"   "6206638"   "6213714"   "6283708"   "6554563"   "7097418").PN. OR ("7217088"). URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/01/29 10:10
S101	2	"2553548".pn.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/01/29 14:52
S102	195	415/114.ccls.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/09/02 13:16
S103	13	("4712979"   "5320483"   "5320485"   "5340274").PN. OR ("5954475").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/09/02 13:19
S104	702	60/806,754.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	ADJ	ON	2009/09/02 13:40
S105	2732	416/97R,96R,96A,97A,241B,241R.ccls. and ((blade or airfoil or vane\$3) same (hole\$3 or cool \$4))	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/09/02 13:59
S106	53	((MARK) near2 (SLOAN)).INV.	US-PGPUB; USPAT	ADJ	ON	2009/09/02 14:12
S107	7	((EDWARD) near2 (MARQUES)).INV.	US-PGPUB; USPAT	ADJ	ON	2009/09/02 14:14
S108	54	((MATTHEW) near2 (MOORE)).INV.	US-PGPUB; USPAT	ADJ	ON	2009/09/02 14:15
S109	3	((WILLIAM) near2 (BIGBEE-HANSEN)).INV.	US-PGPUB; USPAT	ADJ	ON	2009/09/02 14:16
S110	12	("2641439"   "20020141872"   "3620643"   "5080557"   "5370499"   "5392515"   "5640767"   "5653110"   "5820337"   "6214248"   "6617003"   "6617003").PN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/09/02 15:06

S111	5	("20010016162"   "4669957").PN. OR ("6981846").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/09/02 15:36
S112	20	("3628885"   "4407632"   "4775296"   "4786233"   "5403159"   "5484258"   "5695320"   "5695321"   "5700132"   "5738493"   "5810552"   "5931638"   "6179565"   "6234754"   "6254334"   "6514042").PN. OR ("6808367").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/09/02 15:39
S113	17	("4695247"   "4768700"   "5139824"   "5217757"   "5264245"   "5292594"   "5328331"   "5392515"   "5640767"   "5702232"   "5820337"   "6254334").PN. OR ("6582194").URPN.	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/09/02 15:50
S114	2007	415/115,116.ccls. and ((blade or airfoil or vane \$3) same (hole\$3 or cool\$4))	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/09/02 16:32
S115	1235	S114 not S105	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/09/02 16:33
S116	1146	S115 not S104	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/09/02 16:33
S117	1129	S116 not S102	US-PGPUB; USPAT; USOCR	ADJ	ON	2009/09/02 16:33

### EAST Search History (Interference)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L2	19	60/806,754,736.ccls.	UPAD	ADJ	ON	2009/09/05 14:30
S118	2367	415/114,115,116.ccls.	USPAT; UPAD	ADJ	ON	2009/09/02 16:55
S119	483	60/806,754.ccls.	USPAT; UPAD	ADJ	ON	2009/09/02 16:57
S120	5	416/97R,96R,96A,97A,241B,241R.ccls.	UPAD	ADJ	ON	2009/09/02 16:58

9/ 5/ 2009 2:33:17 PM

C:\ Documents and Settings\ pwongwian\ My Documents\ EAST\ Workspaces

\Open\_cooled\_component\_for\_gas\_turbine1641.wsp